

Testimony of
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Modern Public School Facilities: Investing in the Future

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Thank you Chairman Miller, Congressman McKeon, Congressman Kildee, Congresswomen Woolsey, Davis, Sanchez and all members of the Education and Labor Committee for the opportunity to offer testimony regarding federal investment in school facilities and to share the perspectives and needs of California. I am Kathleen Moore, Director of the School Facilities Planning Division of the California Department of Education. My division is responsible for reviewing and approving school sites and design plans for all California schools as well as administering the Qualified Zone Academy Bond Program (QZAB) authorized by the Tax Payer Relief Act of 1997, P.L. 105-34. Prior to taking my position with the Department, I was Director of Development and Planning for the Elk Grove Unified School District, one of the fastest growing school districts in the nation at the time, where I had the privilege and responsibility to plan and finance over 27 new and 22 modernized schools in 15 years. I hope to bring a statewide as well as district perspective to the hearing here today.

Chairman Miller and members of the committee, State Superintendent of Public Instruction Jack O'Connell fully supports the H.R. 3021 the 21st Century High-Performing Public School Facilities Act introduced by Representative Chandler, along with yourself, Mr. Chairman, and the subcommittee chairman Kildee, H.R. 3902 Congressman Loeb'sack's Public School Repair and Renovation Act, H.R. 3197 the School Building Enhancement Act authored by representative Holt, as well as H.R. 2470, the American's Better Classrooms Act (ABC) sponsored by Ways and Means Committee Chair Rangel, Congressmen Ramstad, Etheridge and 216 House colleagues. The ABC bill provides financing through federal tax credits for \$25 billion in bonds to build new schools and renovate and repair existing schools. The program provides a tax credit to the

purchaser of the bonds saving the local school district the cost of the long interest of the bond.

California has a staggering \$9 billion need for new construction funds as well as \$3.4 billion in modernization needs. We believe successful federal facilities programs such as the current QZAB program and the 2001 Federal Repair and Renovation Program serve as models for the type and quality of federal investment that is necessary to ensure that all students have safe and modern facilities that not only support but enhance student learning and achievement.

The demand for new and renovated public school facilities is unprecedented in our nation's history. Los Angeles Unified School District, the second largest school district in the nation, is undertaking one of the largest public works programs in the nation to build and modernize schools. With this demand comes an opportunity to create 21st century learning environments that may look and operate very differently than many of our existing schools designed under the 19th century factory model.

My comments focus on four specific areas: (1) the impact of facilities on student achievement and teacher retention, (2) California's school facilities needs, (3) the economic benefits of school construction, and (4) successful federal facility programs and the need for continued and expanded federal assistance.

The Impact of Facilities on Student Achievement and Teacher Retention

There is a growing body of research on the importance of school facility condition, design and maintenance on student performance and teacher workplace satisfaction. The National Clearinghouse for Educational Facilities (NCEF), created by

the United States Department of Education in 1997, cites over 40 academic research papers on this subject. Professor Earthman from the University of California at Los Angeles finds that researchers have repeatedly found a difference of between 5-17 percentile points between achievement of students in poor buildings and those students in above-standard buildings, when the socioeconomic status of students is controlled.¹ Similarly, in 2005, the Design Council of London published, in response to a national effort in the UK to create world class 21st century school buildings, a review of 167 sources which showed clear evidence that extremely poor environments have a negative effect on students and teachers and improving these have significant benefits.² Poor building conditions greatly increase the likelihood that teachers will leave their school.³ Numerous studies have confirmed the relationship between a school's physical conditions and improved attendance and test scores, particularly in the areas of indoor air quality, lighting, thermal comfort and acoustics.⁴

Not surprisingly, building age, quality and aesthetics also make a difference. Schneider (2002) found “there is a consensus in the research that newer and better school buildings contribute to higher student scores on standardized tests.”⁵ Research also indicates that student attitudes and behavior improve when the facility conditions improve. Teachers report that adequate space and access to technology are important variables to deliver curriculum. Facility directors report that new and renovated schools

¹ Glen I. Earthman, “School Facilities Conditions and Student Academic Achievement.” Report prepared for *Williams v. State of California*, University of California, Los Angeles, 2002, pp. 8-9.

² Steve Higgins and others, “The Impact of School Environments: A Literature Review.” Design Council, London, UK, 2005.

³ Jack Buckley, Mark Schneider, and Yi Shang, “The Effects of School Facility Quality on Teacher Retention in Urban School Districts.” National Clearinghouse for Educational Facilities, Washington DC, 2004.

⁴ Mark Schneider, “Do School Facilities Affect Academic Outcomes?” National Clearinghouse for Educational Facilities, Washington, D.C., 2002.

⁵ Schnieder, 2002, p. 8.

can provide better opportunities for small schools, joint use and spaces for community, classrooms outfitted for better technology, and “green” design.

We know that for significant reform to be effective, design flexibility is necessary, particularly at the secondary level to allow for such programs as Career Technical Education and organizational structures such as small learning communities to flourish. A 2005 study of a large urban Texas School District concluded building design such as large group instruction areas, color schemes, outside learning areas, instructional neighborhoods, and building on a student scale had a statistically significant impact on performance.⁶

Also of note is the impact of school facilities on community vitality. School quality has a direct and positive impact on residential property values,⁷ new or well-maintained school facilities can help revitalize distressed neighborhoods,⁸ and school quality helps determine localities’ quality of life and can affect the ability of an area to attract businesses and workers.⁹

In summary, the physical condition of school facilities impact student achievement and experience as well as teacher retention and community vitality. A quality school facility is but one component necessary for successful learning, alone it is no silver bullet, but together with rigorous standards, qualified teachers and system accountability, it can positively impact educational outcomes.

⁶ Stephanie Hughes, “The Relationship Between School Design Variables and Student Achievement in a Large Urban Texas School District”, Baylor University, Waco, Texas, 2005.

⁷ Thomas Kane and others, “School Accountability Ratings and Housing Values”, The Brookings Institute, Washington, D.C., 2003

⁸Local Government Commission. “New Schools for Older Neighborhoods: Strategies for Building our Communities’ Most Important Assets.” Sacramento, California, 2002.

⁹David Salveson and Henry Renski, “The Importance of Quality of Life in the Location Decisions of New Economic Firms.” *Reviews of Economic Development Literature and Practice, No.15*. Economic Development Administration, U.S. Department of Commerce, 2002.

California School Facility Needs

California serves a total of 6.3 million K-12 students and has passed some of the largest state bonds in the nation's history and yet the unmet facility need is estimated at \$6.9 billion. Under the current School Facility Program, K-12 school districts must demonstrate the need for new or modernized facilities. The districts have identified a need to construct new schools to house over 600,000 pupils and modernize schools for an additional 1 million pupils. The cost to address these needs is estimated to be roughly \$9 billion for new construction for which we currently have about \$2.7 billion available and \$3.4 billion for modernization for which we currently have \$2.8 billion available.

In terms of modernization, assistance is needed to bring our older school facilities up to today's educational and code standards and to allow these facilities to be more energy efficient. We do a decent job of building new schools in California; however, modernization for educational program changes and improvements is just not occurring. Our state modernization dollars simply cover access compliance, paths of travel and systems upgrades. Many districts are being asked to choose between making American with Disability Act (ADA) improvements and completing other modernization work on the campus thus resulting in facilities that continue to have aging infrastructure.

At the direction of Governor Schwarzenegger, California is leading by example on energy efficiency and conservation, sustainability, green building and green purchasing practices. Through Executive Order S-20-04, known as the "Green Building Initiative," and the accompanying Green Building Action Plan, the Governor calls for

public buildings to be 20 percent more energy efficient by 2015 and encourages the private sector to do the same.

California schools are also following suit. There is currently \$100 million available in High Performance Incentive Grants for California schools. The program will fund new construction, modernizations and relocatables that can be deemed environment-friendly if they are based on designs and materials that promote the efficient use of water, natural resources and energy, and also provide superior indoor air quality, acoustics, and lighting. California voters approved the incentive package under Proposition 1D in November 2006.

Our state is exploring the potential for “grid neutrality” (i.e. zero net energy) in all new schools in California, a concept that means schools will not only self-generate all the energy they need, but will also put excess energy back into the grid. The success of this concept will rely on continued federal tax credits and accelerated depreciation of solar and other alternative energy equipment.

The Economic Benefits of School Construction

Prior to the passage of our state’s 2004 statewide facilities bond measure, an analysis was conducted to determine the economic benefits of such a bond measure on the California economy. The analysis found that the expenditure of funds for school construction will generate economic impact which greatly exceeds the direct construction expenditures. In the last two statewide bond cycles alone, the approximate \$10 billion already expended created over 175,000 jobs and doubled the direct impact on the economy to approximately \$20 billion because construction activity generates additional

business and employment in sectors which provide the lumber, concrete, and many other goods and services which go into the construction and modernization of schools. These benefits would extend to federal construction funds as proposed in H.R. 3021 and 3902 and serve as an economic stimulus beyond the intrinsic value of new and modernized schools for students and staff.

The Federal Role in Facilities – Past, Present and Future

We have been asked to comment on a federal facility role. I have discussed this with my colleagues and the members of the Californians for School Facilities, an organization made up of school districts, architects and construction professionals who tirelessly advocate on behalf of California's school facilities needs and thought back to my tenure in a fast growing school district. Resoundingly the needs were the same: assistance in ensuring all students, including those with special needs, have access to a quality education supported by modern facilities that meet not only access and compliance requirements (Americans with Disabilities Act) but are designed to support today's standards and curriculum, are constructed with quality and energy efficient materials that will stand the test of time, and are equipped with technology that will support and indeed enhance learning.

The education landscape is changing. Schools are more and more centers of communities that are expected to be available 24/7 for after and before school programs, parent and community education, intervention programs, field areas --- all of which place stress on the infrastructure. School leaders grapple with the increasing maintenance and modernization demands and costs.

Further, California is deeply committed to closing the achievement gap and we believe that safe, up-to-date, quality facilities are part of the solution to this complicated problem.

I would like to highlight two very successful federal programs which have assisted Local Educational Agencies (LEAs) meet their facilities demands.

The first is the Qualified Zone Academy Bond (QZAB) program. The Qualified Zone Academy Bond Program has been a very popular program in California since its inception. The program permits LEAs serving large concentrations of low income families to benefit from interest-free financing to pay for building repair and renovation, invest in equipment and technology, develop challenging curricula, and train quality teachers. QZABs are bonds the federal government subsidizes by allowing bondholders to receive tax credits that are approximately equal to the interest that states and communities would pay holders of taxable bonds. As a result, issuers (LEAs) are generally responsible for repayment of just the principal.

Since the first QZABs authorization in calendar year 1998 through calendar 2007 California has utilized nearly \$500 million in allocations. This program has proven invaluable in providing resources to assist school districts in establishing and tailoring academy programs to improve student career opportunities statewide. The program leverages local business involvement by requiring a local business to make a contribution worth the equivalent of 10 percent of an actual bond sale. The financial investment provided by QZABs for school facilities also supports economic growth within California by assisting with the enhancement of school construction projects and increased job development.

QZABs require a minimal federal investment while providing large school renovation results. Following are two examples of successful career academies that have benefited from the use of QZABs:

Clovis Unified School District/Fresno Unified School District

The Clovis and Fresno Unified School Districts are located in urban areas of Fresno County. In the two districts together, there are approximately 115,000 students in 146 schools. Approximately 60 percent of the students qualify for free or reduced-price lunch. The districts jointly applied for QZAB authorization in the amount of \$12 million. Funds were used to rehabilitate an existing warehouse/manufacturing plant to establish eleven technological academies of the Center for Advanced Research and Technology (CART). The technological laboratory suites are available to more than 1,600 students from the two school districts and provide relevant, specialized experiences in agriculture, biomedicine, chemistry, design/engineering, environment, financing, information, logistics/spatial, manufacturing, and telecommunications.

The school's partners were Microsoft, Grundfos Pump Corporation, Johanson Transportation, and Richard Lake, CPA. These contributions from the business community, totaling \$2 million, were well above the required 10 percent match.

Baldwin Park Unified School District

The Baldwin Park Unified School District is located in Los Angeles County, 20 miles from the city of Los Angeles. The region is very urban, and 80 percent of its 19,000 students qualify for free or reduced-price lunch.

The district requested \$12 million under the QZAB program to establish two Computer Technology Academies at Sierra Vista and Baldwin Park High Schools. The

academies focus on vocational technology, specifically through a service technician and the network technician certification programs. These two programs provide students with skills necessary to become certified as service and network technicians based on a worldwide standard of competency. Students have the opportunity to obtain industry-recognized certifications upon graduation that prepare them for ongoing technology education and careers. Teachers receive ongoing professional technology training with the most up-to-date equipment available. All high school students within the district are able to enroll in academy classes.

The bond issued by Baldwin Park Unified was used to modernize the structure and technology of the two sites in order to support the programs. The schools' primary partner was Intel. JES & Co., a non-profit education organization, also provided the academies with curriculum, materials, and teacher training.

We encourage Congress to renew the QZAB program and to expand its support for the construction of new schools to support 21st century learning through Congressman Rangel's American's Better Classroom Act.

The second successful federal program is the Federal Renovation Program. The U.S Department of Education Consolidated Appropriations Act of 2001 set aside \$103.6 million for the urgent renovation and repair of existing school facilities in California. The uniqueness of this program allowed charter and non-profit private schools, in addition to public school districts and county superintendents of schools, to participate by applying for funds. The qualifying criteria were broken down into three funding categories as follows: high poverty, high poverty and rural, rural only and non-high poverty or rural.

The number of LEAs that applied for the Federal Renovation Program funding in California was 783. A total of 410 LEA's applications received funding, which represented 52 percent of the total applications received. The funds accomplished some of the following: emergency repairs and renovations, modifications to comply with ADA, asbestos abatement and system upgrades. More importantly, California was able to distribute the funding expeditiously to schools for projects that had immediate impact on the economy. LEAs complemented the flexibility of the program to meet locally determined facility needs with minimal audit and record keeping ---a model we strongly suggest. Congressman Loeb'sack's bill H.R. 3021 reestablishes this very successful program.

Conclusion

California has a \$6.9 billion unmet school facilities need. Modernization of our older schools for educational and technological advances is particularly needed. The federal government has authorized two excellent facilities programs in the past and the proposed legislation discussed here today will positively impact the physical and educational condition of the nation's schools.

I sincerely appreciate this opportunity to testify before the Education and Labor Committee. We stand ready to assist you in crafting legislative language that will provide needed federal funding to support state and local efforts and to build and modernize school facilities. Our objective is to meet 21st century education standards and design so that our students can achieve and ultimately succeed in the global economy.